Environment

- Matlab2024a

Data Preparation

Neurophysiological data are recorded using Plexon Omniplex system and Blackrock Cerebus system.

Run the matlab file in "francsyn" folder to generate Figure 1B(right), Figure 1C(right):
- info_calculation_forL.m

while info_calculation_forL.m will automatically read original data from "francsyn" directory:

1. neuron_data.mat
2. toyvscell_fullresponse.mat

Run the matlab file in "behaviral_synergy" folder to generate Figure 3C, Figure 3D:
- behav_inf.m

while info_calculation_forL.m will automatically read original data from "behaviral_synergy" directory:

1. ga_allinfodata.mat
2. re_allinfodata.mat
3. xt_allinfodata.mat

Run the matlab file in "opulation Stimulus synergy" folder to generate Figure 4C-E:
- MT_popss.m

Run the matlab file in "2D_Behavior_Synergy" folder to generate Figure 5A-D:
- popss5ab.m
- popss5cd.m

Run the matlab file in "MT_popsim_multiD" folder to generate Figure 6A-C:
- MT_popsim_multiD_encoding.m